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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/289,067	04/08/1999	DAVID R. IRVIN	1280.00101	8219

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EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/289,067

Applicant(s)

IRVIN ET AL.

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8-12,15-17,19,23,25,32-36 and 38-91 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 8-12, 15-17, 19, 23, 25, 32-36, and 38-91 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 8-12, 15-16, 32-36, 38-41, and 49-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S. Patent No. 5,666,661 or "Grube" hereinafter) in view of Raith (U.S. Patent No. 6,493,550 B1).

Regarding claim 1, Grube discloses a method of generating a control signal, i.e., control information in the control channel for controlling or generating communication request between the mobile terminal unit and the system controller (Fig. 1/item 120, and col. 1/lines 23-32, and col. 2/lines 44-56), comprising the steps of: determining the location of a first mobile radio terminal; determining the location of a second mobile radio terminal; comparing the locations of the first mobile radio terminal and the second mobile radio terminal; and generating a control signal in response said comparing, wherein the first mobile radio terminal and the second mobile radio terminal are within a specified distance, i.e., the initiating mobile unit and the target mobile unit are both identified by the resource controller based on their own and separate locations, and the control signal regarding as an activation signal in the form of a message conveying on the control channel is generated or activated based on the comparison between two locations of the mobile units within a specified distance (Fig. 2, and col. 2/lines 44-67).

Grube does not further mention the step of "generating a control signal in response comparing the locations of the first mobile radio terminal and the second mobile radio terminal,

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wherein the control signal activates the first mobile radio terminal if the locations of the first mobile radio terminal and the second mobile radio terminal are within a specified distance”;

however, Raith teaches an exact same technique as Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s system with Raith’s teaching technique of having a proximity detector installed within a SIM card as a key means (authorization key) to permit the generation of the control signals from one mobile radio terminal to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith.

(Claim 2-7 were canceled).

As for claim 8, Grube further discloses the comparing and generating steps are performed by the first mobile radio terminal”, i.e., the comparison procedure is done at one of the mobile unit (Fig. 3/steps 300 & 301 & 302).

As for claim 9, Grube further discloses “wherein the determining steps are performed by using at least one of a global positioning system and a cellular positioning system” (col. 2/lines 31-43).

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As for claim 10, Grube discloses “wherein the comparing step further comprises the step of comparing a current time with a preselect time” , i.e., two units are mobile radio terminals and they are constantly moving; thus the distance between them is variable. Therefore, the procedure as illustrated in Fig. 3 can be consistently repeating in terms of the current time and then the preselect time, for example, within 30 minutes or an hour for conversation, for automatically checking the favorable distance between them (col. 3/line 53 to col. 4/line 9).

Regarding claim 11, in further view of claim 1 above, Grube discloses a method of generating a control signal comprising the steps of “determining the location of at least two mobile terminals; comparing at least one of the specific location of the at least two mobile radio terminals to at least one predetermined location, and the specific location of the at least two mobile radio terminals and time to at least one predetermined location and time”, i.e., the initiating mobile unit and the target mobile unit are both identified by the resource controller based on their own and separate locations, and the control signal regarding as an activation signal in the form of a message conveying on the control channel is generated or activated based on the comparison between two locations of the mobile units within, or separated by, a specified distance (Fig. 2, and col. 2/lines 44-67) as well as at least one predetermined location such as one from a group call in addition to two communication units (two mobile radio terminals of concerned), whereas the location and time of the group call members are identified by the system controller (col. 3/lines 8-17); furthermore, two mobile radio terminals and other members in the group call are mobile and they are constantly moving; thus the distance between them is variable. Therefore, the procedure as illustrated in Fig. 3 can be consistently repeating in terms of the current time and then the preselect time, for example, within 30 minutes or an hour for conversation, for automatically checking the favorable distance between them (col. 3/line 53 to col. 4/line 9).

Grube does not further address that “generating a control signal in response said comparing, wherein the control signal may enable or disables at least one application in at least one of said two mobile radio terminal”; Raith teaches an exact same technique as Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s system with Raith’s teaching technique of having a proximity detector installed within a SIM card as a key means (authorization key) to permit or inhibit the generation of the control signals or a wide range of applications (as suggested in Raith, col. 6/lines 5-16 for limiting some amount of information and/or two-way data transfer capability) from one mobile radio terminal to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith.

Regarding claim 12, in view of claim 11 above, Grube teaches comprising “N mobile radio terminals, wherein $N \geq 2$; the comparing step comprises comparing the locations of the N mobile terminals with M different specified locations, wherein $M \leq N$; and the generating step comprises generating a control signal if at least one of the N mobile radio terminals is located at each of the M different specified locations”, i.e., N mobile terminals ≥ 2 and M different

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locations are addressed by Grube because a group call (understood that a group call is formed by two or more persons) is mentioned (see the Examiner's discussion in claims 1, 11 above and col. 1/lines 25-32; and M represents the location of each moving radio terminals, then M must be $\leq N$ at different locations because mobile radio terminals are not stationary).

(Claims 13-14 were canceled).

Regarding claims 15-16, in further view of claim 11 above, these claims for "wherein the at least two mobile radio terminals comprise N mobile radio terminals, wherein $N \geq 2$; the comparing step comprises comparing the locations of the N mobile radio terminals with N specified locations assigned to each of the N mobile radio terminals, and the generating step comprises generating a control signal if each of the N mobile radio terminals is located at its assigned location" and "wherein the N specified locations include N different specified locations" are rejected for the reasons given in the scope of claims 11 and 12 as already disclosed in details above.

As for claims 32-36 and 38-41, these limitations are already addressed in claims 1, and 7-12 above, and these claims are rejected for the reasons given in the scope of claims 1, and 7-12 above.

As for claims 49-91, these claims with same limitation as addressed earlier are rejected for the same reasons given in the scope of claims 1, 8-12, 15-16 with Raith teaches about the Bluetooth technology and short-range communication as discussed earlier.

3. Claims 17, 19, 23, 25 and 42-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S. Patent No. 5,666,661) in view of Lachance (U.S. Patent No. 6,246,882) and Raith (U.S. Patent No. 6,493,550 B1).

Regarding claims 17 and 23, in the described “a method of generating a control signal comprising the steps of: receiving an initiation signal from a first mobile radio terminal, said initiation signal including the location of the first mobile radio terminal; transmitting a location query to a second mobile radio terminal; receiving the location of the second mobile radio terminal in response to the location query; comparing the locations of the first and second mobile radio terminals; and generating a control signal based upon comparing the locations of the first and second mobile radio terminal” and further in the step of “transmitting a location query to the first mobile radio terminal and a second mobile radio terminal”, Grube discloses everything (see claims 1 and 11 above) except that Grube does not mention to include “a location query” transmitted as claimed; however, such a technique of using “a location query” from a location server in requesting the location information from the mobile units is known in the art.

In fact, Lachance discloses an exact same technique, in which “a location query” can be sent from a location node or location database to mobile users via a MSC and a base station (Lachance, col. 5/lines 39-52) and the step of determining the comparison the locations at the location server is followed (see col. 6/line 51 to col. 7/line 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s technique of handling communication between mobile units in close proximity with Lachance’s technique of using a location query transmitted from a location server in order to obtain the location information or location updates from the mobile users as much often as possible as disclosed by Lachance.

Grube and Lachance do not further mention the step of generating a control signal based upon said “comparing and transmitting the control signal from the location server to the first

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mobile radio terminal to activate the first mobile radio terminal for use if the locations of the first and second mobile radio terminals are within a specified distance”; however, Raith teaches an exact same technique as Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s system with Raith’s teaching technique of having a proximity detector installed within a SIM card as a key means (authorization key) to permit and inhibit the generation of the control signals from one mobile radio terminal to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith.

Regarding claims 19 and 25, Raith discloses the step of “wherein the first mobile radio terminal comprises a mobile communication device, and wherein the second mobile radio terminal comprises a key that may alternatively activate, deactivate, lock and unlock the mobile communication device only when the locations of the mobile communication device and the key are within the specified distance” (see the Examiner’s discussion in claims 1 and 11 for the permitting and/or inhibiting for the generation of the control signals or a wide range of

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applications in Raith, col. 6/lines 5-16 for limiting some amount of information and/or two-way data transfer capability from one mobile radio terminal to other mobile terminals above).

As for claims 42-48, these claims are rejected for the reasons given in the scope of the combination of claims 1, 7-12, 15-16, 17, and 19 as already discussed in details above.

Response to Arguments

4. Applicant's arguments filed on 04/19/2004 have been fully considered but they are not persuasive due to following reasons.

In response to applicant's argument that the examiner's required to thoroughly answer the substance of Applicant's therein, the Examiner would do so to please the Applicants, but please note that although the arguments seem to be super long and relatively complex; however, the REAL and MAIN contents are simply short surround the statements that the Examiner does not provide the motivation to combine the references, improper hindsight reasoning, the modification does not support by the references, and the limitations are being repeatedly argued for is the comparison step of locations of a first mobile terminal and a second mobile terminal and the activation of the first one if both mobiles are within a specified distance. The Applicants go on to support these statements by pointing out to incorrect or improper paragraphs of the cited references, i.e., the Abstract (being referred to so many times), while within the Examiner's action, the Examiner never cites the Abstract once because the Abstract is believed to be a very broad scope of the invention, and it does not provide a concise concept of the invention with alternative embodiments; AND the Applicants were silent on other columns and paragraphs that the Examiner cited throughout the Office Action as step-by-step details in a very clear and direct explanations.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the

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time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). See the following combined statements for the motivation to combine the references, not based upon improper hindsight reasoning as assumed by the Applicants.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Grube already suggests that within a particular group communication or a private call, a direct mode is used for directly connecting between mobile users without using the system resource (Grube, col. 1/lines 53-59 & col. 2/lines 15-43) and Grube further uses the geographic locations of the mobile users for determining the distance between the mobile users of that particular group call (Grube, col. 2/line 44 to col. 3/line 28). Grube clearly suggests that as soon as the two mobile a within a specified distance which detected by the system, a direct mode is used in to reserve the system resource; yet Grube does not suggest the activation of a first mobile terminal if a specified distance between the two radio terminals is detected.

Meanwhile, Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device

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that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube's system with Raith's teaching technique of having a proximity detector installed within a SIM card as a key means (authorization key) to permit the generation of the control signals from one mobile radio terminal to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith. Based on Raith's teaching, the motivation here is clearly for the mobile user detects the proximity of other mobiles within a particular network for direct connection, as in other case in Grube, within a particular or private communication group for saving the system resource; and this is a proper and valid combination for almost identical systems to combine in order to maximize the usefulness of direct communications between mobile stations. The Examiner do not know the reason why the Applicants states "applicants can find nowhere in Raith where it discusses direct communications between mobile stations" and "direct handset communications are not supported by the disclosure in Raith" by pointing out to incorrect columns and paragraphs (see page 4, 2nd paragraph). Everyone knows that Bluetooth technology is certainly for direct communication between handsets or mobile stations, and the

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Examiner does not have to show the detailed specifications of the Bluetooth technology; and by the way, Bluetooth was developed in the form of a consortium of Intel, Microsoft, IBM, Toshiba, Nokia, Ericsson and Puma Technology in April 1998 (Newton's Telecom), not by the assignee of this application alone. Please refer to the rest of other limitations in the office action above. Thus, based on these proper reasoning, the combination of Grube, Raith, and Lachance stands valid as disclosed in the office action.

Therefore, the Examiner disagrees with the Applicants and stands with the disclosure and teaching of Grube, Raith, and Lachance as previously presented in the non-final office action and discussed in this final office action.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

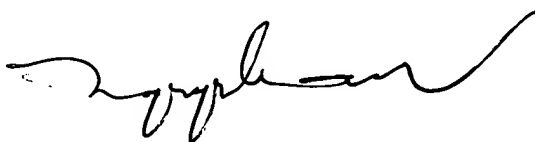
(703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



TONY T. NGUYEN
PATENT EXAMINER, FSA

Tony T. Nguyen
Art Unit 2685
July 8, 2004